

Nonferrous Metal (Except Copper and Aluminum) Rolling, Drawing, and Extruding: 2002

Issued December 2004

EC02-311-331491 (RV)

2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
Economics and Statistics Administration
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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
331491, Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	2002 ..	294	326	16 760	759 462	11 629	23 679	461 941	1 888 433	2 253 183	4 179 771	125 428
	2001 ..	N	N	22 319	926 952	15 806	33 018	602 771	2 400 488	3 198 770	5 593 237	199 088
	2000 ..	N	N	23 828	972 723	17 050	35 325	651 453	2 522 655	3 561 543	6 103 571	198 071
	1999 ..	N	N	24 432	976 845	17 651	37 921	642 605	2 579 078	3 651 889	6 192 238	210 832
	1998 ..	N	N	25 581	997 651	18 685	39 156	647 863	3 051 813	4 001 655	7 049 867	239 681
	1997 ..	220	264	25 484	977 877	18 616	40 298	643 810	2 982 604	4 013 631	7 057 705	247 299

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331491, Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding												
United States	1	326	108	16 760	759 462	11 629	23 679	461 941	1 888 433	2 253 183	4 179 771	'125 428
Alabama	—	9	3	338	8 521	224	397	5 052	33 842	40 277	72 842	'710
California	2	28	5	326	17 303	229	480	8 753	60 210	41 949	101 592	'5 949
Connecticut	—	11	6	768	37 598	517	1 038	21 650	122 298	140 573	256 251	'14 832
Florida	5	12	4	377	14 600	274	587	8 215	63 842	43 517	108 833	'3 405
Indiana	—	13	2	884	45 291	577	1 342	25 350	126 459	126 966	258 381	'5 206
Massachusetts	—	7	4	584	19 022	427	741	12 539	43 637	93 252	136 687	'1 001
New Jersey	—	15	7	732	33 069	554	1 171	22 654	56 671	66 929	124 857	'3 813
New York	5	21	9	1 132	42 907	802	1 460	28 093	119 943	182 763	304 029	'3 725
North Carolina	—	9	4	1 356	62 910	951	1 724	37 755	133 870	222 784	371 786	'5 699
Ohio	—	16	9	1 549	75 175	1 107	1 960	48 525	151 610	203 782	362 273	'11 020
Pennsylvania	1	31	15	1 141	51 875	800	1 690	32 529	163 177	193 796	356 811	'12 422

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
331491, Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	
Companies ¹	294
All establishments ²	326
Establishments with 1 to 19 employees	218
Establishments with 20 to 99 employees	66
Establishments with 100 employees or more	42
All employees ³	16 760
Total compensation	1 003 450
Annual payroll	759 462
Total fringe benefits	243 988
Production workers, average for year	11 629
Production workers on March 12	11 680
Production workers on May 12	11 848
Production workers on August 12	11 557
Production workers on November 12	11 423
Production worker hours	23 679
Production worker wages	461 941
Total cost of materials	2 253 183
Materials, parts, containers, packaging, etc., used	1 975 736
Resales	67 695
Purchased fuels	45 074
Purchased electricity	76 283
Contract work	88 395
Quantity of electricity purchased for heat and power	1 600 884
Quantity of electricity generated less sold for heat and power	—
Total value of shipments	4 179 771
Primary products value of shipments	3 878 710
Secondary products value of shipments	151 967
Total miscellaneous receipts	149 094
Value of resales	77 011
Contract receipts	48 465
Other miscellaneous receipts	23 618
Primary products specialization ratio	96
Value of primary products shipments made in all industries	4 100 978
Value of primary products shipments made in this industry	3 878 710
Value of primary products shipments made in other industries	222 268
Coverage ratio	95
Value added	1 888 433
Total inventories, beginning of year	1 060 513
Finished goods inventories	208 045
Work-in-process inventories	584 910
Materials and supplies inventories	267 558
Total inventories, end of year	1 031 501
Finished goods inventories	219 821
Work-in-process inventories	534 979
Materials and supplies inventories	276 701
Gross value of depreciable assets (acquisition costs) at beginning of year	'2 467 482
Total capital expenditures (new and used)	'125 428
Buildings and other structures (new and used)	'15 924
Machinery and equipment (new and used)	'109 504
Automobiles, trucks, etc., for highway use	'1 120
Computers and peripheral data processing equipment	'10 600
All other expenditures for machinery and equipment	'97 784
Total retirements	'71 449
Gross value of depreciable assets at end of year	'2 521 461
Depreciation charges during year	'135 608
Total rental payments	32 147
Buildings and other structures	15 749
Machinery and equipment	16 398
Total other expenses ⁴	198 910
Response coverage ratio ⁵	84
Repair and maintenance services of buildings and/or machinery ⁴	30 572
Communications services ⁴	7 009
Legal services ⁴	3 977
Accounting, auditing, and bookkeeping services ⁴	1 413
Advertising and promotional services ⁴	2 607
Expensed computer hardware and supplies and purchased computer services ⁴	7 880
Refuse removal (including hazardous waste) services ⁴	5 516
Management consulting and administrative services ⁴	13 397
Taxes and license fees ⁴	10 735
All other expenses ⁴	115 802

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331491, Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding											
All establishments	1	326	16 760	759 462	11 629	23 679	461 941	1 888 433	2 253 183	4 179 771	'125 428
Establishments with—											
1 to 4 employees	9	136	274	11 531	202	393	7 320	28 560	39 103	67 942	'1 143
5 to 9 employees	7	38	262	12 116	188	382	7 579	25 387	45 826	75 912	'989
10 to 19 employees	4	44	595	27 017	407	811	14 888	67 000	68 809	135 737	'2 339
20 to 49 employees	3	41	1 348	58 829	927	1 975	32 759	215 243	240 352	448 458	'16 923
50 to 99 employees	—	25	1 834	78 793	1 251	2 564	49 158	227 866	252 309	481 755	'10 963
100 to 249 employees	1	26	4 047	174 442	2 900	5 854	111 136	499 063	519 941	1 004 811	'42 517
250 to 499 employees	1	12	4 615	202 213	3 300	6 308	124 946	413 221	620 871	1 024 005	'32 757
500 to 999 employees	—	2	g	D	D	D	D	D	D	D	D
1,000 to 2,499 employees	—	2	g	D	D	D	D	D	D	D	D
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	143	596	27 219	450	919	17 439	70 281	98 617	168 898	'2 545

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	326	16 760	759 462	11 629	23 679	461 941	1 888 433	2 253 183	4 179 771	'125 428
3314912	Nickel and nickel-base alloy mill shapes	23	3 965	185 832	2 725	5 683	114 188	487 970	569 041	1 086 072	'23 145
3314913	Titanium and titanium-base alloy mill shapes	17	3 645	175 973	2 575	4 945	112 139	362 159	480 708	871 217	'20 048
331491A	Precious metal mill shapes	20	2 694	115 751	1 910	3 728	69 538	286 567	483 523	771 521	'40 168
331491D	All other nonferrous metal mill shapes	46	4 807	211 772	3 244	7 002	123 352	588 336	513 728	1 077 330	'36 625
331491F	Apparatus wire and cord and flexible cord sets (except aluminum, copper, wiring harnesses and fiber optic), made in plants that draw wire	4	c	D	D	D	D	D	D	D	'597
331491H	Magnet wire, (except aluminum and copper), made in plants that draw wire	3	c	D	D	D	D	D	D	D	—

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding	2002.. N 1997.. N	X X	X X	4 100 978 6 800 299
3314912	Nickel and nickel-base alloy mill shapes	2002.. N 1997.. N	X X	X X	1 063 082 N
33149121	Nickel and nickel-base alloy plate, sheet, strip, and wire	2002.. N 1997.. N	X X	X X	1 057 198 N
3314912101	Nickel and nickel-base alloy plate, sheet, and strip, excluding nickel-copper alloys	1,000 s tons. 2002.. 11 1997.. N	X X	S N	528 333 N
3314912111	Nickel-copper alloy mill shapes and forms (except wire)	1,000 s tons. 2002.. 9 1997.. N	X X	D N	D N
3314912118	Nickel and nickel alloy wire, including insulated wire and cable	1,000 s tons. 2002.. 11 1997.. N	9.5 N	9.5 N	118 250 N
3314912106	Other nickel and nickel-base alloy mill shapes, excluding nickel-copper alloys and wire	1,000 s tons. 2002.. 8 1997.. N	31.1 N	D N	D N
3314912Y	Nickel and nickel-base alloy mill shapes, nsk	2002.. N 1997.. N	X X	X X	5 884 N
3314912YWV	Nickel and nickel-base alloy mill shapes, nsk	2002.. N 1997.. N	X X	X X	5 884 N
3314913	Titanium and titanium-base alloy mill shapes	2002.. N 1997.. N	X X	X X	838 664 1 531 313
33149131	Titanium and titanium-base alloy mill shapes	2002.. N 1997.. N	X X	X X	838 664 1 525 741
3314913101	Titanium and titanium-base alloy ingot	1,000 s tons. 2002.. 3 1997.. 6	X X	7.2 P33.1	87 634 575 933
3314913106	Forging and extrusion titanium and titanium-alloy ingot (billet)	1,000 s tons. 2002.. 7 1997.. 6	X X	S S	268 609 254 117
3314913111	Other titanium and titanium-base alloy mill shapes (including sheet, plate, tubing, bar, etc.), excluding wire	1,000 s tons. 2002.. 18 1997.. 20	22.4 S	18.1 S	482 421 695 691
3314913Y	Titanium and titanium-base alloy mill shapes, nsk	2002.. N 1997.. N	X X	X X	— 5 572
3314913YWV	Titanium and titanium-base alloy mill shapes, nsk	2002.. N 1997.. N	X X	X X	— 5 572
331491A	Precious metal mill shapes	2002.. N 1997.. N	X X	X X	703 478 N
331491A1	Other precious metal mill shapes, excluding wire	2002.. N 1997.. N	X X	X X	687 034 N
331491A101	Gold mill shapes, excluding wire	2002.. 9 1997.. N	X X	X X	235 472 N
331491A106	Silver mill shapes, excluding wire	2002.. 8 1997.. N	X X	X X	80 067 N
331491A118	Precious metal wire, including insulated wire and cable	2002.. 14 1997.. N	X X	X X	250 442 N
331491A111	Other precious metal mill shapes, including platinum-group metals, excluding wire	2002.. 10 1997.. N	X X	X X	121 053 N
331491AY	Precious metal mill shapes, nsk	2002.. N 1997.. N	X X	X X	16 444 N
331491AYWV	Precious metal mill shapes, nsk	2002.. N 1997.. N	X X	X X	16 444 N
331491D	All other nonferrous metal mill shapes	2002.. N 1997.. N	X X	X X	1 103 964 N
331491D1	Other nonferrous metal rolled, drawn, and extruded shapes, excluding wire	2002.. N 1997.. N	X X	X X	913 379 N
331491D106	Lead and lead-base alloy plate, sheet, and strip, excluding wire	1,000 s tons. 2002.. 18 1997.. N	192.4 N	S N	195 200 N
331491D111	Other rolled, drawn, and extruded lead and lead-base alloy mill shapes (including pipe, tubing, traps, and bends), excluding wire	2002.. 20 1997.. N	X X	X X	110 936 N
331491D121	Tungsten and tungsten-base alloy mill shapes, excluding wire	2002.. 7 1997.. N	X X	X X	21 765 N
331491D126	Molybdenum and molybdenum-base alloy mill shapes, excluding wire	2002.. 7 1997.. N	X X	X X	50 571 N
331491D141	Other nonferrous metals, rolled, drawn, and extruded shapes, excluding wire	2002.. 22 1997.. N	X X	X X	534 907 N
331491D2	Other nonferrous wire (except copper, aluminum, nickel, and precious metals)	2002.. N 1997.. N	X X	X X	189 944 N
331491D218	Other nonferrous wire (except copper, aluminum, nickel, and precious metals), including insulated wire and cable	2002.. 17 1997.. N	X X	X X	189 944 N
331491DY	All other nonferrous metal mill shapes, nsk	2002.. N 1997.. N	X X	X X	641 N
331491DYWV	All other nonferrous metal mill shapes, nsk	2002.. N 1997.. N	X X	X X	641 N
331491F	Apparatus wire and cord and flexible cord sets (except aluminum, copper, wiring harnesses and fiber optic), made in plants that draw wire	2002.. N 1997.. N	X X	X X	D N
331491F1	Apparatus wire and cord and flexible cord sets (except aluminum, copper, wiring harnesses and fiber optic), made in plants that draw wire	2002.. N 1997.. N	X X	X X	D N
331491F100	Apparatus wire and cord and flexible cord sets (except aluminum, copper, wiring harnesses and fiber optic), made in plants that draw wire ¹	2002.. 5 1997.. N	X X	X X	D N

See footnotes at end of table.

Table 6a. **Products Statistics: 2002 and 1997—Con.**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding—Con.				
331491H	Magnet wire, (except aluminum and copper), made in plants that draw wire	2002.. N	X	X	D
	1997.. N		X	X	N
331491H1	Magnet wire, (except aluminum and copper), made in plants that draw wire	2002.. N	X	X	D
	1997.. N		X	X	N
331491H100	Magnet wire, (except aluminum and copper), made in plants that draw wire ²	2002.. 5	X	X	D
	1997.. N		X	X	N
331491W	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding, nsk, total	2002.. N	X	X	315 357
	1997.. N		X	X	212 934
331491WY	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding, nsk, total	2002.. N	X	X	315 357
	1997.. N		X	X	212 934
331491WYWW	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding, nsk, for nonadministrative-record establishments	2002.. N	X	X	176 436
	1997.. N		X	X	104 237
331491WYWY	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding, nsk, for administrative-record establishments	2002.. N	X	X	138 921
	1997.. N		X	X	108 697

¹For additional detail, see Current Industrial Report MA335J, Insulated Wire and Cable. Also, this product code is primary to more than one industry. See industries 331319, 331422 and 335999, product codes 331319E101, 3314224218 and 335999B100.

²For additional detail, see Current Industrial Report MA335J, Insulated Wire and Cable.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3314912	Nickel and nickel-base alloy mill shapes	
	United States..... 2002..	1 063 082
	..... 1997..	N
	Pennsylvania..... 2002..	26 376
	..... 1997..	N
3314913	Titanium and titanium-base alloy mill shapes	
	United States..... 2002..	838 664
	..... 1997..	1 531 313
	Ohio..... 2002..	274 267
	..... 1997..	N
	Pennsylvania..... 2002..	98 313
	..... 1997..	142 173
331491A	Precious metal mill shapes	
	United States..... 2002..	703 478
	..... 1997..	N
331491D	All other nonferrous metal mill shapes	
	United States..... 2002..	1 103 964
	..... 1997..	N
	Alabama..... 2002..	55 835
	..... 1997..	N
	California..... 2002..	39 063
	..... 1997..	N
	Connecticut..... 2002..	49 631
	..... 1997..	N
	New Jersey..... 2002..	37 739
	..... 1997..	N
	New York..... 2002..	82 685
	..... 1997..	N
	Ohio..... 2002..	45 467
	..... 1997..	N
	Pennsylvania..... 2002..	78 712
	..... 1997..	N
331491F	Apparatus wire and cord and flexible cord sets (except aluminum, copper, wiring harnesses and fiber optic), made in plants that draw wire	
	United States..... 2002..	D
	..... 1997..	N
331491H	Magnet wire, (except aluminum and copper), made in plants that draw wire	
	United States..... 2002..	D
	..... 1997..	N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331491	Nonferrous metal (except copper and aluminum) rolling, drawing, and extruding		
00900001	Total materials	X	1 975 736
	.....2002..	X	3 624 148
	.....1997..	X	8 835
33122200	Bare steel wire	5.1	38 483
	.....1,000 s tons..2002..	S	
	.....1997..		
33131600	Aluminum and aluminum-base alloy extruded shapes (including extruded rod, bar, pipe, tube, etc.)	D	D
	.....mil lb..2002..	61.9	53 608
	.....1997..		
33100010	All other aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	X	D
	.....2002..	X	N
	.....1997..	D	D
33142127	Unalloyed copper and copper-base alloy rods	D	D
	.....mil lb..2002..	520.0	495 198
	.....1997..	D	D
33142129	Alloyed copper and copper-base alloy rods	D	D
	.....mil lb..2002..	129.0	145 710
	.....1997..		
33142119	Copper and copper-base alloy wire for redrawing	15.9	13 448
	.....mil lb..2002..	P88.2	76 825
	.....1997..	D	D
33100091	Bare copper and copper-base alloy wire, electrical (excluding wire for redrawing)	57.9	89 929
	.....mil lb..2002..	X	18 605
	.....1997..	X	64 068
33141111	All other copper and copper-base alloy shapes and forms (excluding castings, forgings, fabricated metal products, cathodes, ingots, ingot bars, and wire bar)	S	5 780
	.....1,000 s tons..2002..	S	39 195
	.....1997..		
33141935	Magnesium and magnesium-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	2.1	5 500
	.....1,000 s tons..2002..	11.3	47 902
	.....1997..		
33141925	Nickel and nickel-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	P21.7	132 433
	.....1,000 s tons..2002..	9.6	279 131
	.....1997..		
33149105	Zinc and zinc-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	56.0	46 541
	.....1,000 s tons..2002..	32.6	50 907
	.....1997..		
33141945	Molybdenum and molybdenum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	S	20 799
	.....mil lb..2002..	4.4	30 540
	.....1997..		
33149101	Titanium and titanium-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	21.3	244 854
	.....1,000 s tons..2002..	66.5	411 321
	.....1997..		
33141903	Precious metals and precious metal alloy shapes and forms (excluding castings, forgings, and fabricated metal products)	S	180 563
	.....1,000 troy ounces..2002..	2 760.5	255 291
	.....1997..		
33141922	All other nonferrous metal shapes and forms (excluding copper, nickel, precious metals, molybdenum, titanium, and zinc castings, forgings, fabricated metal products)	X	90 533
	.....2002..	X	N
	.....1997..	X	N
00190060	Scrap, including iron, steel, aluminum and aluminum-base alloy (excluding home scrap)	X	44 307
	.....2002..	X	N
	.....1997..		
32521101	Plastics materials and resins	X	D
	.....2002..	X	N
	.....1997..		
32500029	All other chemicals and allied products (excluding plastics materials and resins)	P6.8	26 646
	.....mil lb..2002..	15.0	25 449
	.....1997..		
00970099	All other materials and components, parts, containers, and supplies	X	796 601
	.....2002..	X	903 606
	.....1997..	X	261 959
00971000	Materials, ingredients, containers, and supplies, nsk	X	616 985
	.....2002..	X	
	.....1997..		

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.